

## Refine Search

---

### Search Results -

Terms	Documents
L13 and density	8

---

**Database:**

- US Pre-Grant Publication Full-Text Database
- US Patents Full-Text Database
- US OCR Full-Text Database
- EPO Abstracts Database
- JPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

**Search:** L14

Recall Text
Clear
Interrupt

[Refine Search](#)

### Search History

---

DATE: Wednesday, May 03, 2006    [Printable Copy](#)    [Create Case](#)

Set Name	Query	Hit Count	Set Name
side by side			result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L14	L13 and density	8	L14
L13	L12 and L7	8	L13
L12	L11 and L6	8	L12
L11	L10 and L5	9	L11
L10	L9 and L4	31	L10
L9	L8 and L3	32	L9
L8	L1 and L2	364	L8
L7	refractive adj index	199767	L7
L6	fine adj particle adj fraction	612	L6
L5	mean adj ((geometric adj diameter) or (aerodynamic adj diameter))	212	L5
L4	phospholipid	51512	L4
L3	(hydrofluoroalkane or hydrofluorocarbon or fluorocarbon or fluoroalkane) near10 propellant	3202	L3

L2 (porous or perforat\$) adj (microparticles or microstructures)  
L1 dispersion

948 L2  
599556 L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 20:13:59 ON 03 MAY 2006)

FILE 'CAPLUS, MEDLINE' ENTERED AT 20:14:09 ON 03 MAY 2006

L1        345814 S DISPERSION  
L2        675 S (POROUS OR PERFOR?) (W) (MICROPARTICLE? OR MICROSTRUCTURE?)  
L3        1 S L2 AND ((HYDROFLUOROALKANE OR HYDROFLUOROCARBON OR FLUOROALKA  
L4        2 S L2 AND (HYDROFLUOROALKANE OR HYDROFLUOROCARBON OR FLUOROALKAN  
L5        18520 S (HYDROFLUOROALKANE OR HYDROFLUOROCARBON OR FLUOROALKANE OR FL  
L6        21 S L1 AND L2  
L7        9 S L2 AND SURFACTANT  
L8        3 S L6 AND SURFACTANT  
L9        1 S L6 AND (REFRACTIVE (W) INDEX)  
L10      21 DUPLICATE REMOVE L6 (0 DUPLICATES REMOVED)  
L11      9 DUPLICATE REMOVE L7 (0 DUPLICATES REMOVED)

L6 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Stabilized preparations for use in metered dose inhalers  
 AB Stabilized dispersions are provided for the delivery of a bioactive agent to the respiratory tract of a patient. The dispersions preferably comprise a plurality of **perforated microstructures** dispersed in a suspension medium that typically comprises a hydrofluoroalkane propellant. As d. variations between the suspended particles and suspension medium are minimized and attractive forces between microstructures are attenuated, the disclosed dispersions are particularly resistant to degradation, such as, by settling or flocculation. In particularly preferred embodiments, the stabilized dispersions may be administered to the lung of a patient using a metered dose inhaler.

ACCESSION NUMBER: 1999:233783 CAPLUS  
 DOCUMENT NUMBER: 130:272012  
 TITLE: Stabilized preparations for use in metered dose inhalers  
 INVENTOR(S): Weers, Jeffry G.; Tarara, Thomas E.; Dellamary, Luis A.; Kabalnov, Alexey; Schutt, Ernest G.  
 PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., USA  
 SOURCE: PCT Int. Appl., 58 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 9  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9916422	A1	19990408	WO 1998-US20615	19980929
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2304975	AA	19990408	CA 1998-2304975	19980929
AU 9896772	A1	19990423	AU 1998-96772	19980929
AU 757153	B2	20030206		
EP 1019021	A1	20000719	EP 1998-950826	19980929
EP 1019021	B1	20030903		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PT 1019022	T	20030829	PT 1998-953220	19980929
JP 2003525842	T2	20030902	JP 2000-513560	19980929
AT 248583	E	20030915	AT 1998-950826	19980929
ES 2195408	T3	20031201	ES 1998-953220	19980929
ES 2195415	T3	20031201	ES 1998-954933	19980929
ES 2205560	T3	20040501.	ES 1998-950826	19980929
US 6309623	B1	20011030	US 1998-218212	19981222
CA 2335940	AA	20000106	CA 1999-2335940	19990331
WO 20000000215	A1	20000106	WO 1999-US6855	19990331
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9935469	A1	20000117	AU 1999-35469	19990331
AU 760537	B2	20030515		

EP 1091755	A1	20010418	EP 1999-917320	19990331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003535017	T2	20031125	JP 2000-556800	19990331
US 6630169	B1	20031007	US 2000-720536	20001222
US 2001046474	A1	20011129	US 2001-862764	20010521
US 6638495	B2	20031028		
US 2004170568	A1	20040902	US 2003-644265	20030819
AU 2006200768	A1	20060316	AU 2006-200768	20060224
PRIORITY APPLN. INFO.:			US 1997-60337P	P 19970929
			US 1998-106932	A 19980629
			US 1998-133848	A2 19980814
			WO 1998-US20602	W 19980929
			WO 1998-US20603	W 19980929
			WO 1998-US20613	W 19980929
			WO 1998-US20615	W 19980929
			US 1998-218209	A 19981222
			US 1998-218212	A 19981222
			US 1998-218213	A 19981222
			US 1998-219736	A 19981222
			WO 1999-US6855	W 19990331
			AU 2001-61246	A3 20010508
			US 2001-862764	A1 20010521

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.6 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Stabilized dispersions containing fluorochemical suspension mediums as carriers for pulmonary delivery of bioactive agents, and methods of their use  
 AB Stabilized dispersions are provided for the delivery of a bioactive agent. The dispersions preferably comprise a plurality of **perforated microstructures** dispersed in a suspension medium that typically comprises a liquid fluorochem. As d. variations between the suspended particles and suspension medium are minimized and attractive forces between microstructures are attenuated, the disclosed dispersions are particularly resistant to degradation, such as by settling or flocculation. In particularly preferred embodiments the stabilized dispersions may be directly administered to the lung of a patient using an endotracheal tube or bronchoscope. A **dispersion** containing **perforated microstructure** powder of ampicillin 20, hydroxyethyl starch 14.38, dipalmitoylphosphatidylcholine 65.2 % and perfluorohexane q.s., and deionized water q.s. was prepared, and administered (10 mg ampicillin) via liquid dose instillation (LDI) to pneumonia model rats. The local lung concentration of ampicillin were 250 times higher with LDI delivery as compared with the i.m. administration, and persisted for several days.

ACCESSION NUMBER: 1999:233782 CAPLUS

DOCUMENT NUMBER: 130:272011

TITLE: Stabilized dispersions containing fluorochemical suspension mediums as carriers for pulmonary delivery of bioactive agents, and methods of their use

INVENTOR(S): Dellamary, Luis A.; Tarara, Thomas E.; Kabalnov, Alexey; Weers, Jeffry G.; Schutt, Ernest G.

PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
WO 9916421	A1	19990408	WO 1998-US20613	19980929

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
 DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,  
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
 UA, UG, US, UZ, VN, YU, ZW  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,  
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 CA 2304820 AA 19990408 CA 1998-2304820 19980929  
 AU 9896770 A1 19990423 AU 1998-96770 19980929  
 AU 756693 B2 20030123  
 EP 1019020 A1 20000719 EP 1998-950824 19980929  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 PT 1019022 T 20030829 PT 1998-953220 19980929  
 JP 2003525841 T2 20030902 JP 2000-513559 19980929  
 ES 2195408 T3 20031201 ES 1998-953220 19980929  
 ES 2195415 T3 20031201 ES 1998-954933 19980929  
 ES 2205560 T3 20040501 ES 1998-950826 19980929  
 US 6433040 B1 20020813 US 1998-218209 19981222  
 CA 2335940 AA 20000106 CA 1999-2335940 19990331  
 WO 2000000215 A1 20000106 WO 1999-US6855 19990331  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
 JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 9935469 A1 20000117 AU 1999-35469 19990331  
 AU 760537 B2 20030515  
 EP 1091755 A1 20010418 EP 1999-917320 19990331  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 JP 2003535017 T2 20031125 JP 2000-556800 19990331  
 US 6630169 B1 20031007 US 2000-720536 20001222  
 US 2002188281 A1 20021212 US 2001-999071 20011203  
 AU 2006200768 A1 20060316 AU 2006-200768 20060224  
 PRIORITY APPLN. INFO.:  
 US 1997-60337P P 19970929  
 US 1998-106932 A 19980629  
 US 1998-133848 A2 19980814  
 WO 1998-US20602 W 19980929  
 WO 1998-US20603 W 19980929  
 WO 1998-US20613 W 19980929  
 WO 1998-US20615 W 19980929  
 US 1998-218209 A 19981222  
 US 1998-218212 A 19981222  
 US 1998-218213 A 19981222  
 US 1998-219736 A 19981222  
 WO 1999-US6855 W 19990331  
 AU 2001-61246 A3 20010508

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Stabilized preparations for use in nebulizers  
 AB Stabilized dispersions are provided for the delivery of a bioactive agent to the respiratory tract of a patient. The dispersions preferably comprise a stabilized colloidal system which may comprise a fluorochrom component. In particularly preferred embodiments, the stabilized dispersions comprises **perforated microstructures** dispersed in a fluorochrom suspension medium. As d. variations between the suspended particles and suspension medium are minimized and attractive

forces between microstructures are attenuated, the disclosed dispersions are particularly resistant to degradation, such as by settling or flocculation. In particularly preferred embodiments, the stabilized dispersions may be administered to the lung of a patient using a nebulizer.

ACCESSION NUMBER: 1999:233781 CAPLUS  
 DOCUMENT NUMBER: 130:272010  
 TITLE: Stabilized preparations for use in nebulizers  
 INVENTOR(S): Schutt, Ernest G.; Tarara, Thomas E.; Dellamary, Luis A.; Kabalnov, Alexey; Weers, Jeffry G.  
 PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., USA  
 SOURCE: PCT Int. Appl., 63 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 9  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9916420	A1	19990408	WO 1998-US20603	19980929
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2304973	AA	19990408	CA 1998-2304973	19980929
AU 9911857	A1	19990423	AU 1999-11857	19980929
AU 750567	B2	20020725		
EP 1019023	A1	20000719	EP 1998-954933	19980929
EP 1019023	B1	20030507		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001517692	T2	20011009	JP 2000-513558	19980929
AT 239447	E	20030515	AT 1998-954933	19980929
PT 1019022	T	20030829	PT 1998-953220	19980929
ES 2195408	T3	20031201	ES 1998-953220	19980929
ES 2195415	T3	20031201	ES 1998-954933	19980929
ES 2205560	T3	20040501	ES 1998-950826	19980929
US 6946117	B1	20050920	US 1998-218213	19981222
CA 2335940	AA	20000106	CA 1999-2335940	19990331
WO 2000000215	A1	20000106	WO 1999-US6855	19990331
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9935469	A1	20000117	AU 1999-35469	19990331
AU 760537	B2	20030515		
EP 1091755	A1	20010418	EP 1999-917320	19990331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003535017	T2	20031125	JP 2000-556800	19990331
US 6630169	B1	20031007	US 2000-720536	20001222
US 2005207986	A1	20050922	US 2005-76430	20050309
AU 2006200768	A1	20060316	AU 2006-200768	20060224
PRIORITY APPLN. INFO.:			US 1997-60337P	P 19970929
			US 1998-106932	A 19980629

US 1998-133848	A2	19980814
WO 1998-US20602	W	19980929
WO 1998-US20603	W	19980929
WO 1998-US20613	W	19980929
WO 1998-US20615	W	19980929
US 1998-218209	A	19981222
US 1998-218212	A	19981222
US 1998-218213	A	19981222
US 1998-219736	A	19981222
WO 1999-US6855	W	19990331
AU 2001-61246	A3	20010508

REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



# PALM INTRANET

Day : Wednesday

Date: 5/3/2006

Time: 11:33:27

## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.  
Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)



Day : Wednesday

Date: 5/3/2006

Time: 11:33:27

## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.  
Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)



Day : Wednesday

Date: 5/3/2006

Time: 11:33:27

## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.

Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | Home page



Day : Wednesday

Date: 5/3/2006

Time: 11:33:27

## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.  
Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | Home page

 PALM INTRANET

Day : Wednesday

Date: 5/3/2006

Time: 11:33:27

## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.

Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

## Freeform Search

**Database:**  US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

**Term:**

**Display:**  Documents in Display Format:  CIT  Starting with Number

**Generate:**  Hit List  Hit Count  Side by Side  Image

### Search History

DATE: Wednesday, May 03, 2006 [Printable Copy](#) [Create Case](#)

Set Name	Query	Hit Count	Set Name
result set			
	<i>DB=PGPB,USPT; PLUR=YES; OP=OR</i>		
L10	Alexey near Kabalnov	41	<u>L10</u>
L9	Thomas near Tarara	30	<u>L9</u>
L8	Luis near Dellamary	24	<u>L8</u>
L7	Ernest near Schutt	61	<u>L7</u>
L6	Jeffry near Weers	58	<u>L6</u>
	<i>DB=USPT; PLUR=YES; OP=OR</i>		
L5	6946117.pn.	1	<u>L5</u>
L4	6433040.pn.	1	<u>L4</u>
	<i>DB=PGPB; PLUR=YES; OP=OR</i>		
L3	6433040.pn.	0	<u>L3</u>
L2	20040105820	1	<u>L2</u>
	<i>DB=USPT; PLUR=YES; OP=OR</i>		
L1	6638495.pn.	1	<u>L1</u>

END OF SEARCH HISTORY

## Refine Search

### Search Results -

Terms	Documents
L3 and @pd<19980929	8

**Database:**

US Pre-Grant Publication Full-Text Database  
US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Search:**

L4

Refine Search

Recall Text      Clear      Interrupt

### Search History

**DATE:** Wednesday, May 03, 2006 [Printable Copy](#) [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
<small>result set</small>			
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD;	PLUR=YES; OP=OR		
L4	L3 and @pd<19980929	8	<u>L4</u>
L3	L2 and (metering adj valve)	134	<u>L3</u>
L2	L1 and ((fluid or liquid) adj (reservoir or container))	247	<u>L2</u>
L1	metered adj dose adj inhaler	4739	<u>L1</u>

END OF SEARCH HISTORY